



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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December 20, 2007

Ms. Stacy L. Charboneau
Richland Operations Office
United States Department of Energy
P.O. Box 550, MSIN: A3-04
Richland, Washington 99352

RECEIVED
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EDMC

Re: Department of Ecology Rejection of United States Department of Energy (USDOE)
Reclassification Request for the 116-N-1 Waste Management Unit

References: see page 4

Dear Ms. Charboneau:

USDOE requested reclassification of the 116-N-1 Waste Management Unit from "accepted" to "interim closed out." The 116-N-1 Waste Management Unit, also known as the 1301-N Liquid Waste Disposal Unit, is a hazardous waste management unit (HWMU). USDOE requested the reclassification pursuant to Tri-Party Agreement Handbook Procedure MP-14 in their letter dated October 3, 2007 (Reference 1). The effective date of the USDOE request is October 24, 2007. USDOE delivered the reclassification form to Ecology on October 24, 2007.

Ecology rejects the reclassification based on the following reasons:

1. Reclassification rejected because USDOE data conflicts with USDOE statements

In the reclassification request USDOE states that "Remedial action at the 116-N-1 site has been performed in accordance with remedial action objectives and goals." The Department of Ecology rejects the reclassification request because USDOE data conflicts with this statement.

USDOE is required to meet the remedial action goal (RAG) for the protection of the Columbia River. The RAG for chromium is 18.5 mg/kg. USDOE took deep zone samples at boreholes B2536, B2537, and B2539 in 1995 (Reference 4) and several samples approach or exceed the 18.5 mg/kg RAG. USDOE also has to meet the 2.0 mg/kg RAG for hexavalent chromium. USDOE does not have hexavalent chromium data for these boreholes, just total chromium results. The total chromium results are high enough that USDOE cannot use them to show it meets the RAG for hexavalent chromium.

We looked for trends in the 1995 borehole data. We did not see chromium concentrations decrease in proportion to increasing depth. In general, we saw the chromium concentrations

stay about the same with depth, or increase slightly. Because of the apparent trends, we cannot conclude that USDOE remedial actions removed the mass of chromium contamination. We conclude that USDOE needs to collect more data to determine the nature and extent of chromium contamination.

USDOE also collected data in 2005. We analyzed samples split from the USDOE samples. We had already told USDOE that both USDOE and Ecology sample results exceed cleanup levels (References 2 and 3). We again conclude that more data are needed to determine the nature and extent of chromium contamination. Our conclusions are supported by the approved closure plan that states (Section A.4.3.2): "Verification sampling will be performed on contaminants that may be present below 3.0 m or 4.6 m for the purpose of determining compliance with groundwater protection standards."

2. Reclassification rejected because USDOE requested the wrong classification
USDOE requested that 116-N-1 be reclassified to "interim closed out." We reject the request because USDOE used the wrong classification. USDOE requested reclassification through the MP-14 procedure. The MP-14 basis procedure is for "Maintenance of the Waste Information Data System (WIDS)." WIDS describes 116-N-1 as a HWMU. The 116-N-1 is covered by a HWMU closure plan. The correct classifications for a HWMU are "closed out" (meets HWMU closure requirements) or "post-closure" (a Resource Conservation and Recovery Act term for the care needed after the Treatment, Storage, and Disposal Facility unit closure plan has been implemented when there is still waste left in place). The classification "interim closed out" describes completion of work under an interim action Record of Decision (ROD). Reclassification only to the ROD requirements conflicts with the approved Corrective Measures Study (CMS) that states, "As determined in the Tri-Party Agreement, RCRA is the controlling regulatory statute for the waste sites addressed in this CMS."

3. Reclassification rejected because USDOE did not complete the closure plan
USDOE said in the reclassification request:

"After this waste site is backfilled, a Certification of Closure shall be prepared for this site signed by an independent professional engineer and shall be submitted to Ecology."

USDOE conducted remediation efforts at the 116-N-1 site under both a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) interim action ROD and the approved closure plan. USDOE committed to update the closure plan if cleanup plans were changed:

"Should the CERCLA ROD contain provisions inconsistent with the approved Resource Conservation and Recovery Act (RCRA) modifications, the Hanford Facility RCRA permit will again be modified to reconcile these differences during the next permit modification cycle." (Reference 4)

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"The 1301-N and 1325-N closure plan will be amended whenever changes in closure activities or postclosure requirements occur and prior to certification of closure and postclosure, respectively, that would constitute a Class 1, 2, or 3 modification to the Permit (WAC 173-303-830)." (Reference 5, §A.4.10)

USDOE modified the scope of interim actions with an Explanation of Significant Difference (ESD). We concur with the ESD. That ESD created an inconsistency between the CERCLA interim actions and the approved closure plan. The ESD allowed waste to be left in place. The approved closure plan anticipated clean closure (no waste left in place), or an application for modified or landfill closure. USDOE has not done the required modification of its approved closure plan.

4. Reclassification rejected because USDOE did not meet closure performance standards
USDOE says that it achieved "clean closure" of the 116-N-1. We can approve clean closure when a Permittee demonstrates compliance with Washington Administrative Code (WAC) 173-303-610(2)(b)(i)

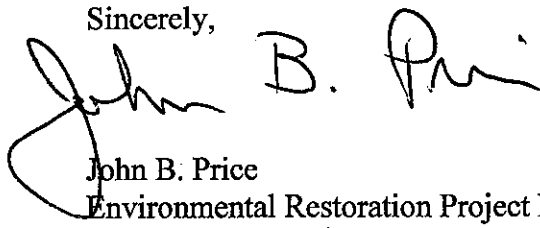
"... then such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed:

- (i) For soils, ground water, surface water, and air, the numeric cleanup levels calculated using unrestricted use exposure assumptions according to the Model Toxics Control Act Regulations, chapter 173-340 WAC as of the effective date or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate, see WAC 173-340-700 through 173-340-760, excluding WAC 173-340-745;"

The data listed above shows that USDOE did not comply with the closure performance standard. In addition, by our letters dated April 11, 2006 (Reference 2), and July 21, 2006 (Reference 3), we communicated that the closure performance standards of WAC 173-303-610 were not satisfied.

If there are any questions, contact me at 509-372-7921.

Sincerely,



John B. Price
Environmental Restoration Project Manager
Nuclear Waste Program

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cc: See page 4

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cc: Steve Weil, USDOE
Terry Noland, FHI
Stuart Harris, CTUIR
Gabriel Bohnee, NPT
Russell Jim, YN

Susan Leckband, HAB
Ken Niles, ODOE
Administrative Record: 116-N-1, D-1-2
Environmental Portal

- References:
1. Letter 08-AMRC-0003, dated October 3, 2007, from J. R. Franco, USDOE, to J. B. Price, Ecology, "Transmittal of Revision 0 Cleanup Verification Package CVP-2006-00004 for the 116-N-1 Site" 0074056
 2. Letter dated April 11, 2006, from J. B. Price, Ecology, to K. D. Bazzell, USDOE, "Backfill Concurrence Checklist for 116-N-1 Combined Crib and Trench (1301-N Trench)" 0069256
 3. Letter dated July 21, 2006, from J. B. Price, Ecology, to K. D. Bazzell, USDOE, "Cleanup Verification Package/Clean Closure Report for the Soil Column of the 116-N-1 (1301-N) Crib and Trench; CVP-2006-00004, Rev. 0, May 2006" 0070280
 4. *100-NR-1 Treatment, Storage, and Disposal Units Corrective Measures Study/Closure Plan*, DOE/RL-96-39, Revision 1, March 2002 0057096
 5. Appendix A, "1301-N and 1325-N Liquid Waste Disposal Facilities," of *100-NR-1 Treatment, Storage, and Disposal Units Corrective Measures Study/Closure Plan*, DOE/RL-96-39, Revision 1, March 2002 0057096